

ATARI PLATO USER'S GUIDE

for Version 3.1

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NOTES:

ATARI PLATO
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SERIAL #105

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1. OVERVIEW

PLATO is the premier interactive graphic computer network in the world that is available to the general public and to worldwide businesses. It has been developed at the University of Illinois for the since 1962 and it is currently marketed by Control Data Corporation. There are more than 20 PLATO systems installed worldwide primarily by Control Data and major universities, with more than 3000 terminals connected. The main reason that this system is not more widespread is due to its cost both in communication and hardware.

ATARI was the first to developed the use of a microcomputer as a PLATO terminal, and it was demonstrated to Control Data in 1981. This accomplishment was a technological breakthrough--nobody thought it was possible, hence nobody tried. Subsequent to that time, there are four other home/personal computers that can be used as a PLATO terminal in addition to ATARI. However, ATARI is the most effective in terms of the features supported and cost due to its unique microprocessor chip set.

The PLATO system was developed with the philosophy that the computer is available to serve human needs, and not be the sole exclusive plaything of a technological priesthood. Hence its emphasis on education, training, and entertainment. It predates the microcomputer and the consumer telecommunication revolution by at least a decade with the following:

- a. Graphics
- b. High resolution text and graphic display
- c. Touch sensitive screen
- d. Wrong spelling recognition algorithm
- e. Electronic mail
- f. Bulletin boards
- g. On-line consultant
- h. access to other PLATO systems

No other system publicly available has all the above integrated features. Most important of all, is the availability of 8000 to 12000 hours of courseware on many subjects suitable for 4 year olds to senior citizens.

2. SIGNON PROCEDURES

If this is the first time you're using ATARI PLATO, please read through this whole procedure:

section 2a
section 2b1 or 2b2
section 2c

before attempting to access PLATO. There are three phases in this process:

Phase 1: If RS232 via the ATARI 950 is being used, make sure that it is on before powering up the ATARI computer with the ATARI PLATO cartridge in the appropriate slot.

Phase 2: Follow the modem access procedure either Section 2b1 or Section 2b2 to connection to the PLATO system.

Phase 3: Follow the PLATO signon sequence Section 2c to enter the PLATO Microlink service.

EXIT from PLATO

The standard way to exit from no matter where you are on the system is one or more PLATO SHIFT-STOP function keypress(es). Almost without exception, on every PLATO screen there are PLATO function key symbols to tell the user what is available. SHIFT-STOP is one of those PLATO function key, and it is dedicated systemwide to be an EXIT key. It is generated on the ATARI by:

- a. pressing SHIFT and START keys simultaneously, and then 's'
- or
- b. pressing START and SELECT keys simultaneously, and then 's'

The above 2 choices are equivalent. Several SHIFT-STOP keys will signoff the user from the PLATO system, then the telephone line can be dropped.

2a. SIX ITEMS YOU MUST KNOW

1. Your PLATO NAME _____
[to identify you on the PLATO system--usually your first initial and your last name]
i.e. v wu for Vincent Wu
2. Your PLATO GROUP: pilotat
[This identifies you as a ATARI PLATO pilot test participant.]
3. TELEPHONE NUMBER _____
[Please see the telephone number list.]
4. NEXT is a PLATO function key, and on the ATARI it is generated by the RETURN key.
5. SHIFT-STOP is a PLATO function key, and on the ATARI it is generated by:
 - a. Press the SHIFT and START key down simultaneously, then press the 's' key.or
 - b. Press the SELECT and START keys down simultaneously, then press the 's' key.
6. PLATO Microlink service is the access for the ATARI PLATO pilot test. The service is available:

weekday 4:00 pm - 1 am
Saturday 5:00 am - 4 pm
Sunday 7:00 am - 3 pm

The above are for California time, and on weekend the service can go later, but don't depend on it.

2b1. 300 baud access

ATARI PLATO supports 300 baud connection with two types of modem:

A. The direct connect modems:

ATARI 830

ATARI 1030

ATARI 1400XL & 1450XLD built-in modem

B. Any RS232 modem using the ATARI 850 and the XL series expansion box via their RS232 port #1.

After inserting the ATARI PLATO cartridge and power-up the ATARI computer, The following title is displayed for type A modems:

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WELCOME TO ATARI PLATO...

After the telephone has the carrier tone, PRESS RETURN!

Dial the appropriate telephone number, press RETURN then replace the handset.

For TYPE B modems, the initial title is:

COPYRIGHT 1981,1983

WELCOME TO ATARI PLATO...

1200 baud

The RS232 connection assumes a default of 1200 baud service. For 300 baud access:

Press OPTION and '3'

then dial the telephone number and do the appropriate exclusion switch. Please consult the modem manual if necessary.

When connection is made to Control Data Network, a double slash '/' will be displayed.

Type 'i', RETURN and then type 'pce', and RETURN

**YOU ARE CONNECTED TO
CONTROL DATA PLATO**

2b2. 1200 baud access

ATARI PLATO supports 1200 baud connection only with the ATARI 850 and the XL series expansion box via their RS232 port #1.

After inserting the ATARI PLATO cartridge, The following title is displayed:

COPYRIGHT 1981,1983

WELCOME TO ATARI PLATO...

1200 baud

If the ATARI 1400XL or the ATARI 1450XLD is being used, then the built-in 300 baud modem is automatically assumed to be utilized. The following title for direct connect modem access is displayed:

COPYRIGHT 1981,1983

WELCOME TO ATARI PLATO...

After the telephone has the carrier tone, PRESS RETURN!

However, the user can switch to 1200 baud connection by pressing:

OPTION and '1'

which is holding the OPTION function key down and pressing the "1" key. Then the screen will replot with the 1st title.

The following 1200 baud modems have been used with success:

type D: Racal-Vadic VA3212
Anderson Jacobson
UDS

type I: BIZCOMP VERSAMODEM 1012
HAYES SMARTMODEM

Type D

Type D modems do not have the auto-dial capability. The user will have to dial the appropriate telephone number and to listen for the carrier tone from the handset. Then the user will have to press an exclusion switch to complete the modem connection. Please consult the modem instruction manual for precise directions.

Type I

Type I modems have the auto-dial capability and each of them have their unique procedures. Please consult the modem instruction manual for precise directions. The following procedure will serve as an example:

FOR BIZCOMP VERSAMODEM 1012

1. Turn ON the modem. If it is already ON toggle the switch by turning it OFF and then ON again.

RESULT: (seen on the screen) a prompt symbol

>

This indicates the BIZCOMP modem command mode is in effect.

2. Press OPTION + 0 for full duplex, no local mode because The BIZCOMP modem uses the full duplex communication method.
3. Type "v", then RETURN for touch tone dialing.

RESULT:

>v

>

4. Type "d", the phone number and then RETURN

for example:

>v

>d 9:123-4567

[the ":" is a pause symbol to get from a local PBX to the outside phone lines. The "-" symbol is ignored.]

The modem will then automatically take the phone off-hook, dial the number that was entered from the keyboard, and make the computer connection.

When connection is made to Control Data Network, a double slash '/' will be displayed.

5. Press OPTION + 0 again, to return communication to half duplex and local echo mode.

Type 'i' RETURN and then type 'pce' RETURN

**YOU ARE CONNECTED TO
CONTROL DATA PLATO**

2c. SIGNON TO CDC PLATO SYSTEM

After you have followed the 300 baud or 1200 baud instructions for connecting to PLATO, the screen will replot with a PLATO title page. It will have PLATO written in big letters, the date and time, Control Data copyright message, and etc. At this time, you are on the Control Data PLATO system.

TYPE YOUR PLATO NAME, THEN PRESS RETURN.

The screen will replot with the PLATO GROUP page.

TYPE YOUR PLATO GROUP; pilotat, THEN PRESS:

SHIFT and START then the 's' key

The screen will replot with the PLATO SECURITY CODE page.

TYPE YOUR SECURITY CODE, THEN PRESS RETURN.

To maintain secrecy, PLATO plots 1 or 2 XX's randomly as you type your security code. This security code should be kept to yourself and its known only unto yourself on PLATO. This password protect your PLATO name and group from unauthorized usages and billings.

After the security code page, you have finished the signon sequence and you are a user of PLATO.

It is highly recommended that you read section 3, the PLATO function keys, because at almost every PLATO screen there are function keys active.

3. FUNCTION KEYS

ATARI PLATO fully supports the unique PLATO function keys. Every attempt has been made for a rational mapping.

The PLATO function keys are generated on the ATARI keyboard by holding the START key and pressing the first letter of the PLATO function key names. The SHIFTED PLATO function keys are generated by either:

- a) Holding the START and SHIFT keys down simultaneously, and pressing the first letter of the PLATO function key names.
- b) Holding the START and SELECT keys down simultaneously, and pressing the first letter of the PLATO function key names.

The above two choices are equivalent.

ATARI PLATO FUNCTION KEY MAPPING

START + a	ANS
START + b	BACK
START + c	COPY
START + d	DATA
START + e	EDIT
START + h	HELP
START + l	LAB
START + n	NEXT
START + s	STOP
START + t	TERM
START + >	SQUARE
START + =	SUP
START + -	SUB

/\ [ATARI] MICRO

SPECIAL PLATO CHARACTER MAPPING

START + +	SUMMATION
START + /	DIVIDE
START + *	MULTIPLY
START + <	ASSIGNMENT ARROW

ATARI PLATO SHIFTED FUNCTION KEY MAPPING

SHIFTED START + a	ANS
SHIFTED START + b	SHIFTED BACK
SHIFTED START + c	SHIFTED COPY
SHIFTED START + d	SHIFTED DATA
SHIFTED START + e	SHIFTED EDIT
SHIFTED START + h	SHIFTED HELP
SHIFTED START + l	SHIFTED LAB
SHIFTED START + n	SHIFTED NEXT
SHIFTED START + s	SHIFTED STOP
SHIFTED START + t	TERM
SHIFTED START + >	SHIFTED SQUARE
SHIFTED START + =	SHIFTED SUP
SHIFTED START + -	SHIFTED SUB
SHIFTED /\ [ATARI]	FONT

SPECIAL PLATO CHARACTER MAPPING

SHIFTED START + +	SUMMATION
SHIFTED START + /	INTERSECT
SHIFTED START + *	UNION
SHIFTED START + 9	[
SHIFTED START + 0]
SHIFTED START + <	SHIFTED ASSIGNMENT ARROW

4. OPTION MODE

[Hold the OPTION key down and press the appropriate letter.]

OPTION

- 1 selects RS232 1200 baud
[Should only be used for initial setup]
- 3 selects RS232 300 baud
[Should only be used for initial setup]
- 0 toggles LOCAL ECHO mode
LOCAL ECHO is SET initially for CDSN and PNI
ACCESS. PLATO RESET LOCAL ECHO at the "Press NEXT
to begin" page.
- b activates background luminance mode
[Then press SELECT to change]
- c activates color selection mode
[Then press SELECT to change]
- f toggles FUNCTION key mode
FUNCTION can be SET if TOUCH is not active and the
screen display is compressed. TOUCH and ZOOM
screen have higher priorities and will RESET
the FUNCTION key mode. When the FUNCTION mode is
active, a letter F will be displayed at the upper
left-hand corner. At that time, the JOYSTICK
movement will be equivalent to pressing
the following PLATO FUNCTION keys.

JOYSTICK DIRECTIONS PLATO FUNCTION KEYS

UP	NEXT
DOWN	BACK
LEFT	LAB
RIGHT	DATA

Hold the FIRE button down and then move the
JOYSTICK will generates the SHIFTED FUNCTION keys.

button + UP SHIFTED NEXT
button + DOWN SHIFTED BACK
button + LEFT SHIFTED LAB
button + RIGHT SHIFTED DATA

- t activates text luminance mode
[Then press SELECT to change]
- z toggles between compressed and zoom screens

5. JOYSTICK USAGE

The ATARI joystick is a versatile tool. There are three modes of usage, listed in the order of priorities:

- a. Zoom/compressed screen toggle
 - b. Touch panel simulation
 - c. Function key mode
- a. Zoom/compressed screen toggle

ATARI PLATO has two screen displays. It starts out with the compressed screen which displays the full PLATO screen resolution of 512 by 512 dots as a 320 by 192 dots image. The Zoom display screen is a moveable window with a slight 25% vertical compression.

If the Touch and Function key modes are disabled, pressing the fire button will toggle between Zoom and compressed screen. Otherwise, the user needs to press **OPTION + z** to switch to the Zoom display screen. Once in the Zoom display screen mode, the fire button and **OPTION + z** will switch back to the compressed display.

b. Touch panel

ATARI PLATO supports the PLATO touch panel when enabled by the PLATO program. ATARI PLATO Touch is enabled only in the compressed display mode, and a cursor will be displayed on the screen. By using the joystick, the user can move the cursor to the appropriate screen position and press the fire button to input an equivalent touch key to PLATO. The joystick will preform auto-repeat touch cursor movement when the user holds it in a particular direction.

CAUTION: Auto-repeat of the fire button is not advisable, because the PLATO system disables Touch momentarily after each touch input. If the user continuously sent Touch inputs via the fire button, the Zoom screen may inadvertently be switched on.

c. Function key mode

If Touch is not enabled and the screen display is in the compressed mode, then **OPTION + f** will toggle the Function key mode. A capital letter **F** will be displayed on the upper left corner of the screen when the Function key mode is active. Please see discussion under **OPTION + f**.

6. CALIFORNIA TELEPHONE NUMBERS

PLATO Microlink Access Telephone Numbers (8/25/83)

-* indicates baud rate not available

CITY	STATE	AC	300 baud	1200 baud
Bakersfield	CA	805	397-8775	397-6113
El Monte	CA	213	350-1701	442-2622
Inglewood	CA	213	642-0871	410-0867
Long Beach	CA	213	537-9162	435-1657
Los Angeles	CA	213	739-7900	739-6900
Mar Vista	CA	213	390-8945	***-****
Mountainview	CA	415	968-7971	968-0442
Newport Beach	CA	714	752-7050	752-6094
Oakland	CA	415	452-5167	834-1850
Oceanside	CA	619	721-2960	***-****
Oxnard	CA	805	***-****	486-4831
Pasadena	CA	213	***-****	440-1001
Pomona	CA	714	***-****	983-5489
Rancho Bern	CA	619	484-0440	451-1260
Sacramento	CA	916	929-1401	929-1607
Santa Barbara	CA	805	968-1072	961-8197
Santa Maria	CA	805	***-****	922-7921
San Bernadino	CA	714	824-1452	820-2151
San Bruno	CA	415	994-3750	***-****
San Diego	CA	619	560-4233	560-0472
San Francisco	CA	415	433-8440	982-7006
San Jose	CA	408	866-3666	866-3852
San Mateo	CA	415	349-0711	***-****
San Rafael	CA	415	459-2613	***-****
Stockton	CA	209	948-2336	***-****
Van Nuys	CA	213	988-9585	786-4891
Walnut Creek	CA	415	945-0193	945-0190